

COVID-19 morbidity and mortality by race, ethnicity and spoken language in Washington state

Washington State Department of Health

March 22, 2022



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Publication Number 420-289

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NOTE: Beginning the week of December 23, 2020, probable cases are included in the metrics calculated for morbidity and mortality associated with race, ethnicity, and spoken language. Probable cases are individuals with a positive antigen test for COVID-19. Also, as of December 16, 2020, probable cases are included in all case, hospitalization, and death counts on the Washington State Department of Health COVID-19 dashboard. Probable cases since June 2020, when the first antigen results were reported in Washington, are now included in the dashboard. This places the report on “COVID-19 Morbidity and Mortality by Race, Ethnicity and Spoken Language in Washington State” in alignment with the Washington State Department of Health COVID-19 Data Dashboard.

Overview

The impacts of COVID-19 morbidity and mortality have not been felt equally by all populations in Washington state. The pandemic has exacerbated the underlying and persistent inequities among historically marginalized communities and those disproportionately impacted due to structural racism and other forms of systemic oppression. This report provides an overview of confirmed or probable COVID-19 case, hospitalization, and death rates by race and ethnicity at state and regional levels. It also provides counts and percentages of confirmed or probable cases and hospitalizations by primary language spoken. Throughout this report, the COVID-19 case definition includes both molecular testing and antigen testing. Molecular positive cases are considered confirmed cases and antigen positive cases are considered probable cases. All hospitalization, death, and testing data reported here are based on positive molecular or antigen test results.

All rates presented in this report are adjusted for age using the Washington state population distribution based on the Office of Financial Management’s (OFM) April 1, 2020 population estimates by age, sex, race, and Hispanic origin. The rate calculations are for the population groups available from OFM for the Washington state population and follow Department of Health guidelines. Hispanic ethnicity was assigned first, regardless of race, and then racial groups were identified for those identifying as non-Hispanic. Based on this, the current report includes the following groups:

- Hispanic; and

- non-Hispanic race categorizations for white, Black, Native Hawaiian and Pacific Islander, Asian, and American Indian/Alaska Native.

While this allows assessment of data by race and ethnicity groups, this categorization is incomplete and does not reflect the diversity of people and experiences across the state. Additionally, there is a significant lack of race and ethnicity reporting for confirmed or probable COVID-19 cases and hospitalizations (about 29% missing) and for deaths (about 0% missing). Primary language spoken is missing for about 75% of cases and hospitalizations. Age information is missing for a small percentage of confirmed or probable cases (about 0.1%), and these cases are not included in age-adjusted rates. The lack of data limits our ability to draw firm conclusions; however, there are some concerning patterns reported below.

Cumulative age-adjusted confirmed or probable COVID-19 case, hospitalization, and death rates by race and ethnicity per 100,000 population

The table and figures below describe the counts and age-adjusted rates per 100,000 population in Washington by race and ethnicity for confirmed or probable cases, hospitalizations, and deaths for the entire time period from the start of the pandemic through 2022-03-21 based on the specimen collection date. 95% confidence intervals are included in the charts.

The data show that communities of color are disproportionately impacted by COVID-19 in significant ways, including the following.

COVID-19 confirmed or probable case rates

- Native Hawaiian and Pacific Islander (NHPI) and Hispanic populations have the highest age-adjusted confirmed or probable case rates while Asian and multiracial populations have the lowest case rates.
- Confirmed or probable case rates for NHPI and Hispanic populations are approximately three times higher than case rates for Asian and multiracial populations.
- Confirmed or probable case rates for Black populations are approximately two times higher than case rates among Asian and multiracial populations.

COVID-19 hospitalization rates among confirmed or probable cases

- Hospitalization rates among confirmed or probable COVID-19 cases are the highest for NHPI populations and lowest for multiracial populations.
- NHPI hospitalization rates among confirmed or probable COVID-19 cases are six times higher than white populations.
- Hispanic hospitalization rates among confirmed or probable COVID-19 cases are two times higher than white populations.
- Hospitalization rates among confirmed or probable COVID-19 cases for Black and American Indian and Alaska Native (AIAN) populations are two times higher compared to white populations.

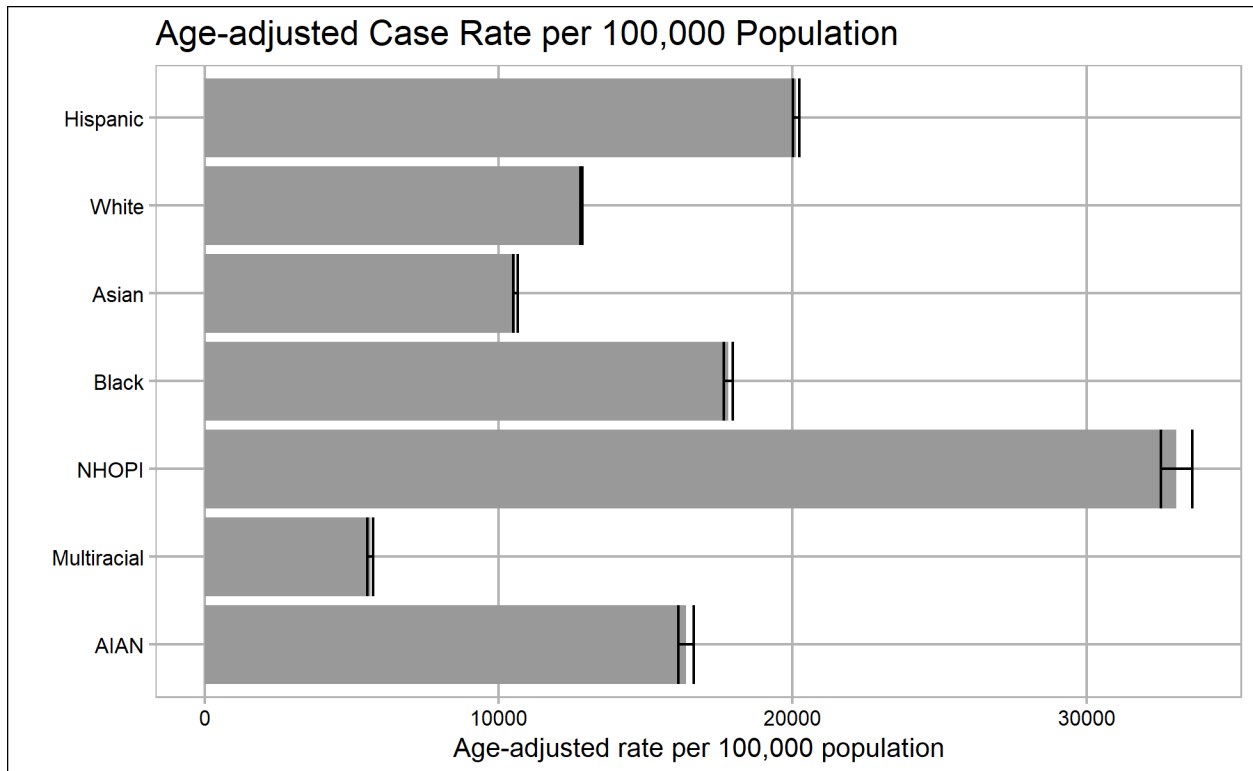
COVID-19 death rates among confirmed or probable cases

- Asian populations have the lowest death rates among confirmed or probable COVID-19 cases of all race/ethnicity groups.
- NHPI populations have death rates among confirmed or probable COVID-19 cases that are approximately five times higher than white and Asian populations.
- AIAN and Hispanic populations have death rates among confirmed or probable COVID-19 cases that are approximately three times higher than Asian populations.
- Black populations have death rates among confirmed or probable COVID-19 cases that are about twice as high as white populations.

Table 1. Confirmed or probable COVID-19 case, hospitalization, and death count and age-adjusted rates by race/ethnicity

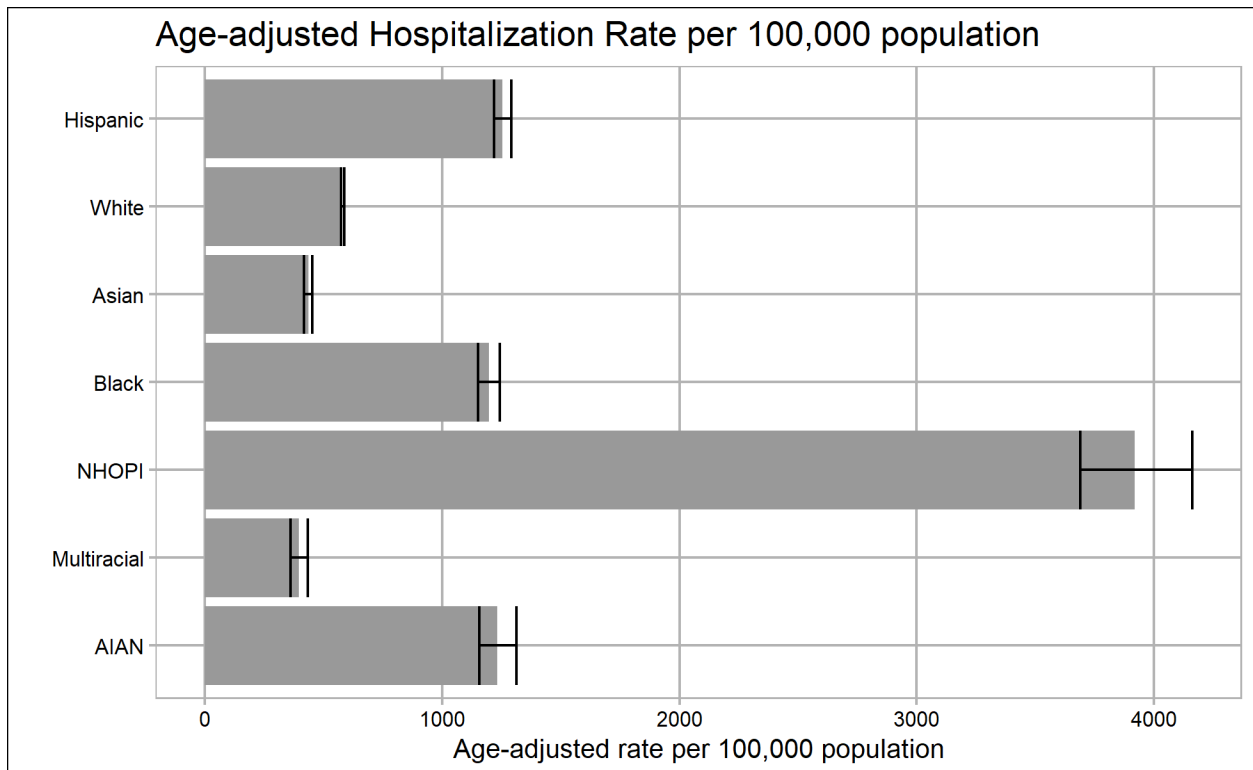
Race/Ethnicity	Case Count	Age-Adjusted Case Rate per 100,000	Hospitalization Count	Age-Adjusted Hospitalization Rate per 100,000	Death Count	Age-Adjusted Death Rate per 100,000
All Races	1,446,734	18896.2	58,896	769.3	12,355	161.4
Unknown	416,514		8,587		30	
Hispanic	202,977	20120.0	6,900	1254.2	1,212	350.2
White	631,386	12801.2	34,252	579.6	9,161	142.6
Asian	78,765	10562.6	2,598	434.8	687	137
Black	56,460	17802.9	2,875	1196.2	424	233.9
NHPI	18,751	33058.2	1,474	3919.0	209	778.5
Multiracial	17,337	5622.8	611	395.2	187	159.4
AIAN	15,767	16374.7	1,026	1232.0	273	390.4
Other	8,777		573		172	

The following graph indicates the age-adjusted confirmed or probable COVID-19 case rate per 100,000 population by race/ethnicity during the time period 2020-01-17 to 2022-03-21



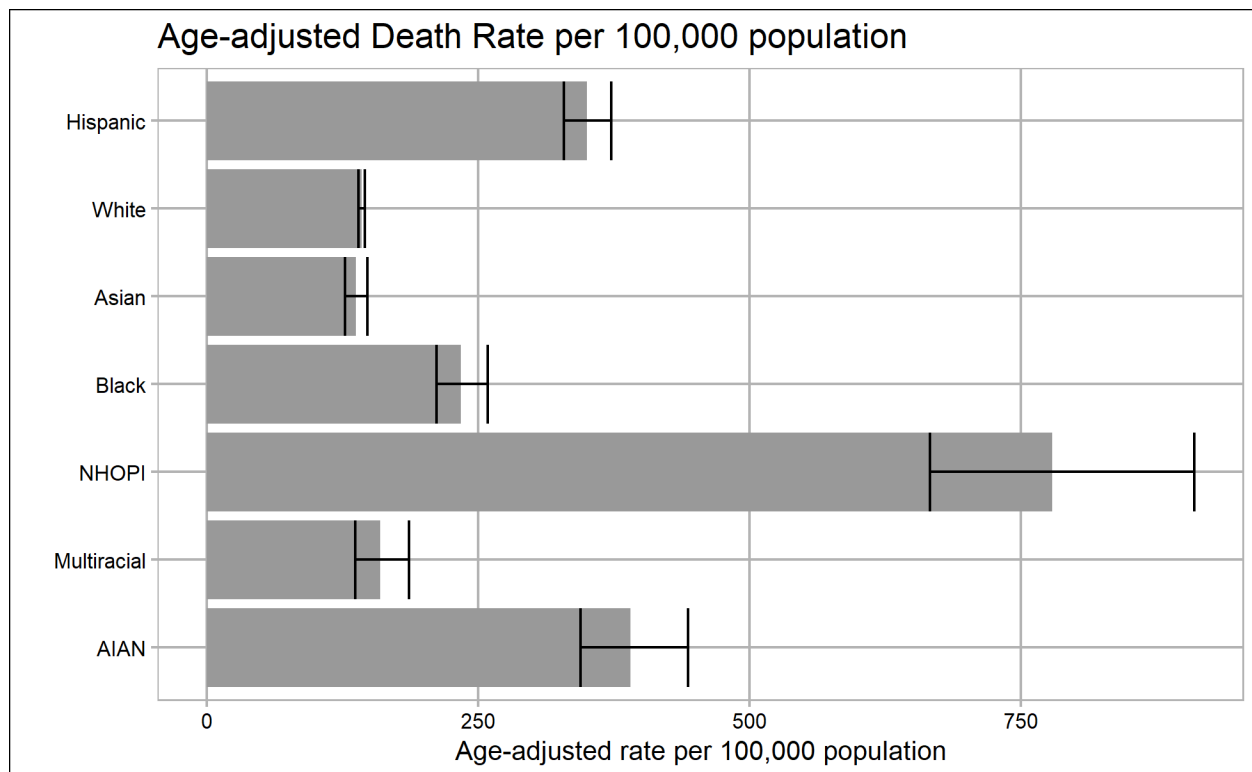
Source: Washington Disease Reporting System (WDRS)

The following graph indicates the age-adjusted hospitalization rate among confirmed or probable COVID-19 cases per 100,000 population by race/ethnicity during the time period 2020-01-17 to 2022-03-21



Source: Washington Disease Reporting System (WDRS)

The following graph indicates the age-adjusted death rate among confirmed or probable COVID-19 cases per 100,000 population by race/ethnicity during the time period 2020-01-17 to 2022-03-21



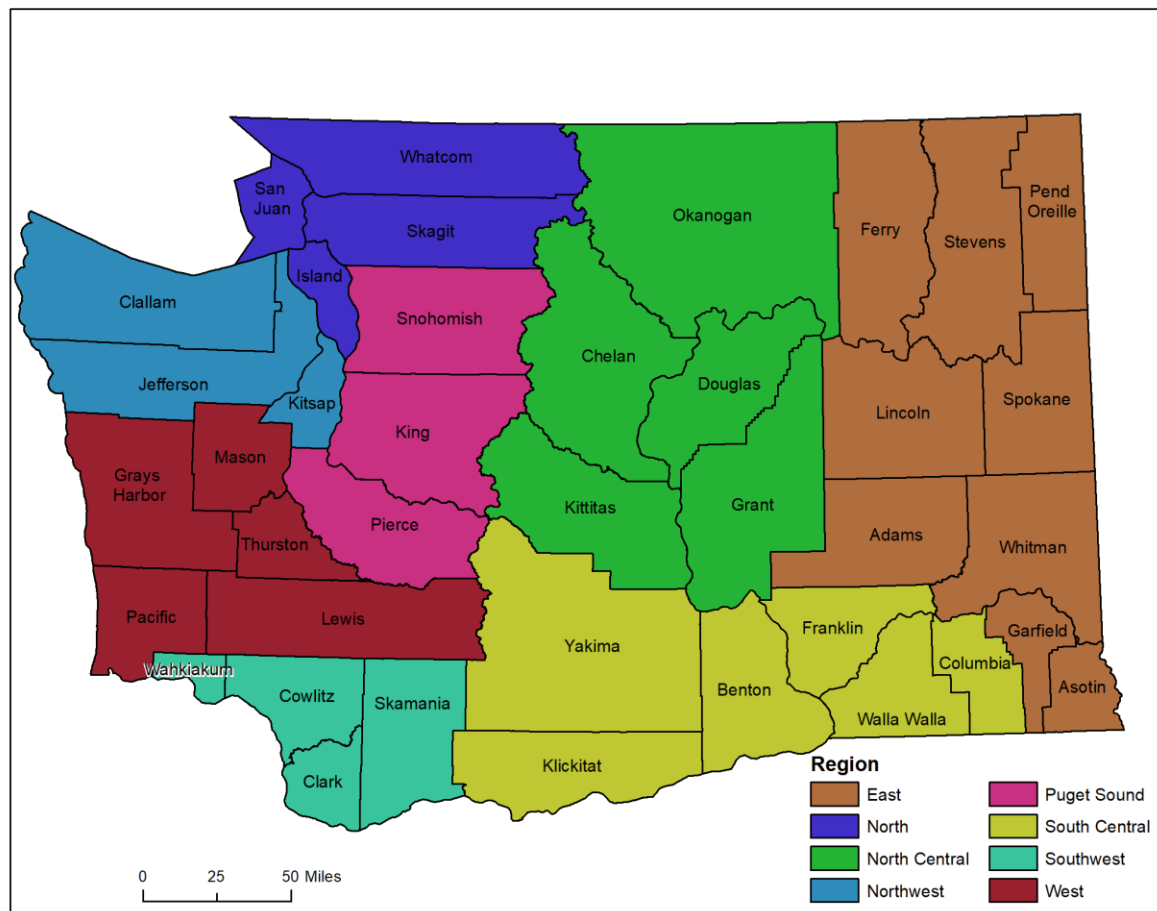
Source: Electronic Death Registration System (EDRS) and Washington Health and Life Events System (WHALES)

Analysis of confirmed or probable COVID-19 cases, hospitalizations, and deaths by geographic region

Regional groupings of Washington state counties

Some counties may not have sufficient case counts to analyze trends by race and ethnicity. In order to incorporate data from counties of all sizes, counties were assigned into one of 8 analytic regions (see Map of Washington Counties and Analysis Regions below). The regions presented were developed by the Washington State Department of Health in order to better understand geographic differences in disease spread and how disease spread may be changing over time. While infection rates may not be the same within any given region, this regional grouping allows for more specific geographic analyses without excluding any counties or communities due to concerns about smaller numbers.

Map of Washington counties by DOH analysis regions



Missing race/ethnicity data by region

The North and Northwest regions have the highest percentage of missing race/ethnicity data among confirmed or probable COVID-19 cases and the North Central region had the lowest percentage of missing data on race/ethnicity, as indicated in the following table. The total number of confirmed or probable cases, and the number and percentage of confirmed or probable cases with missing data are shown in Table 2.

Table 2. Counts and percentage of confirmed or probable COVID-19 cases with unknown race/ethnicity by DOH analytic region.

Region	Case Count	Cases with Unknown Race/Ethnicity	% Cases with Unknown Race/Ethnicity
East	155,314	43,290	28%
North	70,051	27,153	39%

Region	Case Count	Cases with Unknown Race/Ethnicity	% Cases with Unknown Race/Ethnicity
North Central	73,194	17,020	23%
Northwest	53,087	19,741	37%
Puget Sound	710,478	188,533	27%
South Central	174,957	52,433	30%
Southwest	111,915	40,639	36%
West	95,391	25,958	27%
Unknown	3,332	2,332	70%

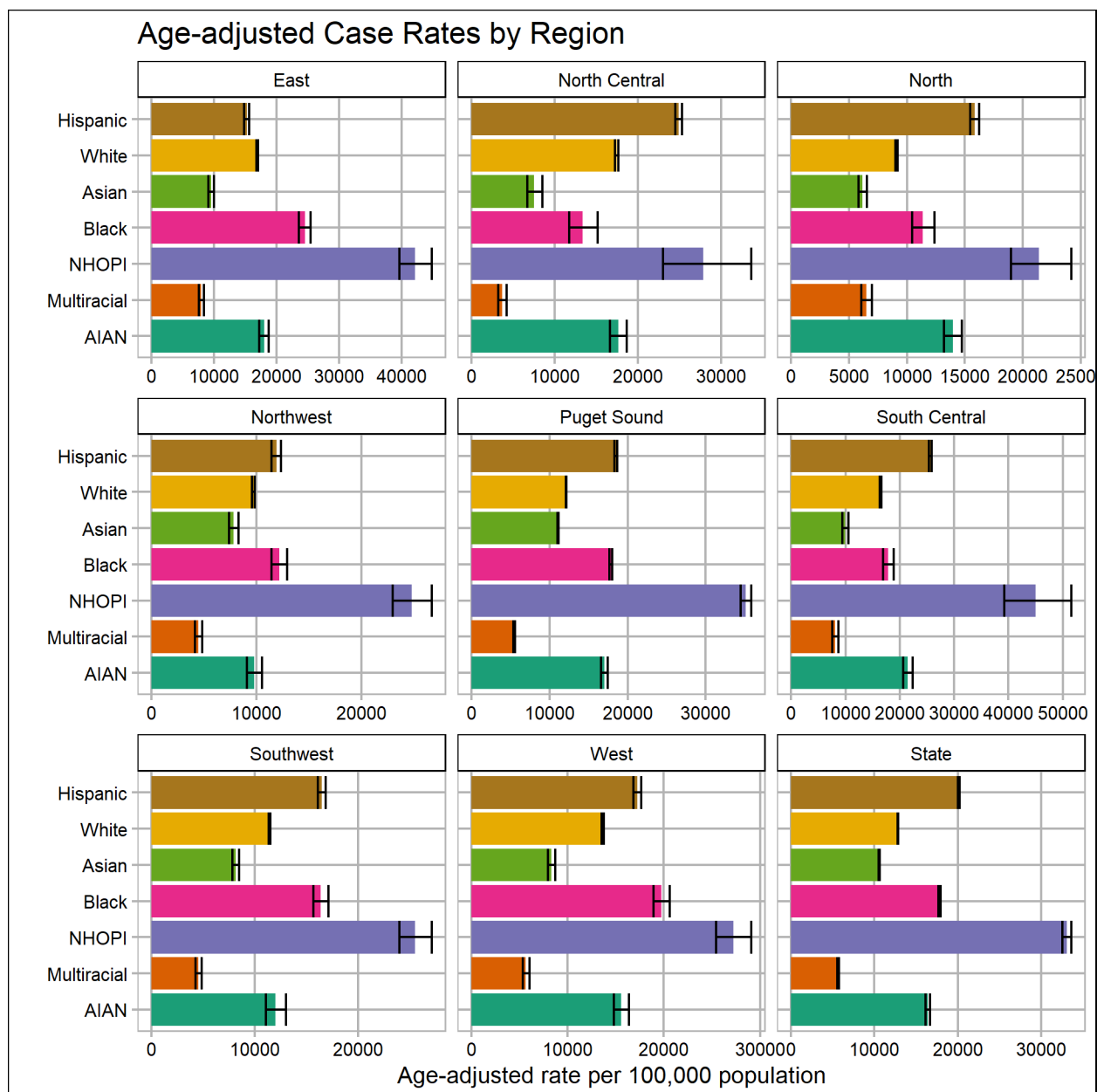
*Source: Washington Disease Reporting System (WDRS)
Includes data from 2020-01-17 to 2022-03-21*

Cumulative age-adjusted confirmed or probable COVID-19 case rates by race, ethnicity, and analytic region

The following figures describe the age-adjusted confirmed or probable COVID-19 case rates per 100,000 population by race/ethnicity and region. They were calculated using the confirmed or probable cases with known race/ethnicity (about 71% of all reported cases).

It is important to note that the numeric scale differs across regions, so use caution when comparing two or more regions, as their scales may differ. The last figure (lower right corner) presents the age-adjusted confirmed or probable COVID-19 case rates for the whole state.

These data indicate that COVID-19 is found in significant numbers across racial and ethnic groups throughout the state, and it is not confined to certain areas, such as rural, urban, or suburban regions. Population centers in Puget Sound contribute substantially to the counts. However less populated regions, like South Central Washington, show larger rate differences by race/ethnicity, although they have smaller populations of racial and ethnic minorities. Further, while extreme disparities exist, people of all races and ethnicities are impacted.

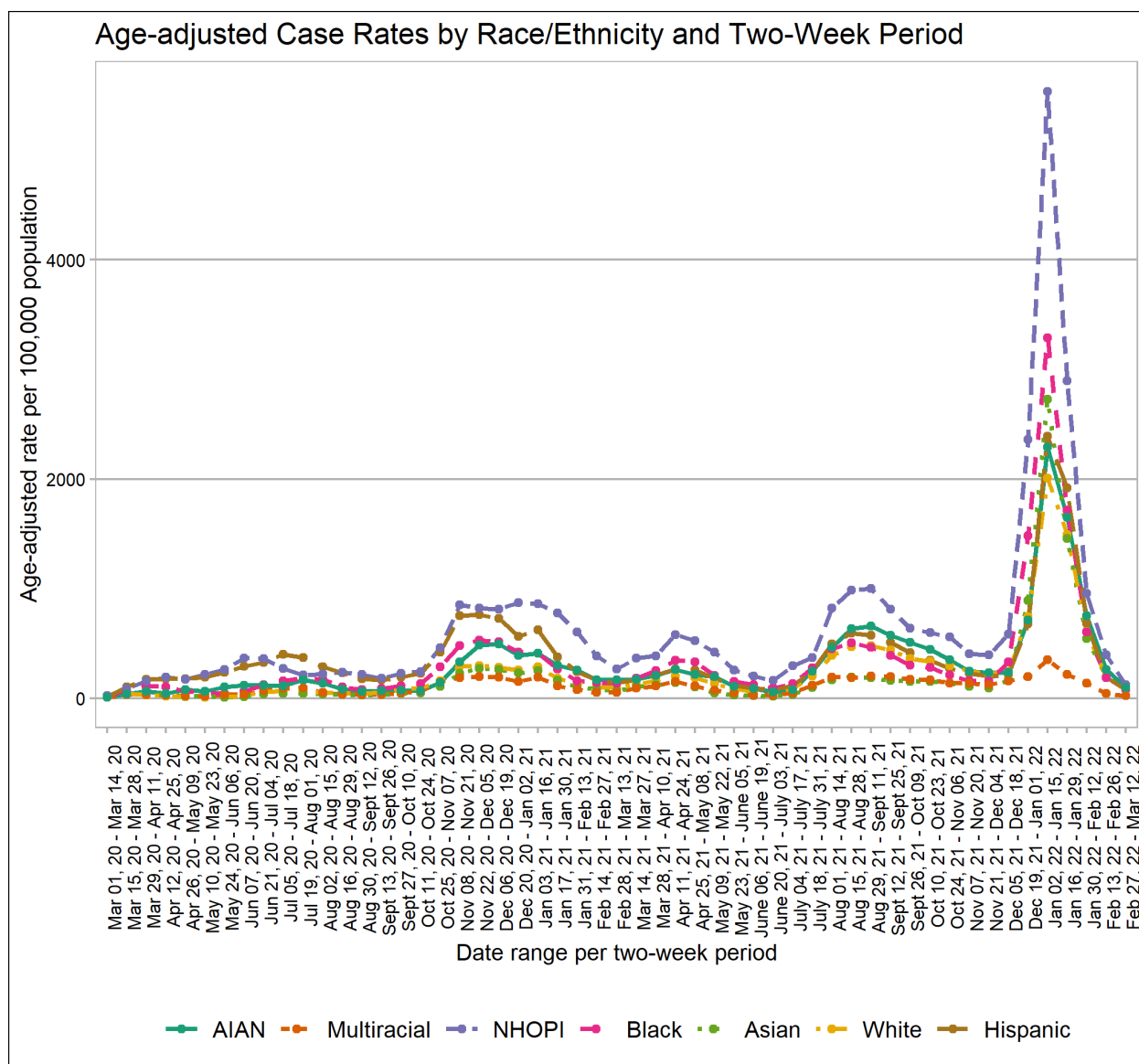


Source: Washington Disease Reporting System (WDRS)

Includes data from 2020-01-17 to 2022-03-21

Age-adjusted confirmed or probable COVID-19 case rates by race and ethnicity per two-week period (Mar 2020-March* 2022)

*February 2022 data include all confirmed or probable cases with a specimen collection date through 2022-03-12 to include the most recent, complete two-week period of data collection.



Confirmed or probable COVID-19 case rates, adjusted for age by race and ethnicity, were calculated to better understand how race- and ethnicity-specific patterns may be changing over time by two-week period. Race/ethnicity-specific counts and age-adjusted rates increased for all race/ethnicity groups through July and early August 2020. All groups declined from early August to mid/late-August and flattened through September 2020. All race/ethnicity-age-adjusted rates began to rapidly increase in mid-October through the end of November. Rates of confirmed or probable cases remain highest for Hispanic and NHPI population, and higher Black and AIAN populations in comparison to white, Asian, and multiracial populations.

Table 3. Age-adjusted confirmed or probable COVID-19 case rates by race and ethnicity per two-week period (Mar 1, 2020 - Mar 12, 2022)

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
Hispanic	Mar 01, 20-Mar 14, 20	107	15.1	12.1	18.8
	Mar 15, 20-Mar 28, 20	704	103.3	94.7	112.7
	Mar 29, 20-Apr 11, 20	1,214	175.6	164.2	187.8
	Apr 12, 20-Apr 25, 20	1,372	176.8	166.0	188.3
	Apr 26, 20-May 09, 20	1,474	177.6	167.1	188.7
	May 10, 20-May 23, 20	1,709	195.4	184.7	206.6
	May 24, 20-Jun 06, 20	2,003	237.1	224.9	250.0
	Jun 07, 20-Jun 20, 20	2,497	293.4	279.8	307.6
	Jun 21, 20-Jul 04, 20	2,922	328.8	314.6	343.6
	Jul 05, 20-Jul 18, 20	3,782	402.9	387.9	418.4
	Jul 19, 20-Aug 01, 20	3,467	372.8	358.2	388.0
	Aug 02, 20-Aug 15, 20	2,663	289.9	276.9	303.4
	Aug 16, 20-Aug 29, 20	2,157	233.1	221.6	245.3
	Aug 30, 20-Sept 12, 20	1,642	176.4	166.4	187.0
	Sept 13, 20-Sept 26, 20	1,516	166.1	156.3	176.5

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
	Sept 27, 20-Oct 10, 20	1,813	191.0	180.8	201.8
	Oct 11, 20-Oct 24, 20	2,150	225.6	214.6	237.1
	Oct 25, 20-Nov 07, 20	4,098	423.5	408.3	439.2
	Nov 08, 20-Nov 21, 20	7,109	754.1	733.6	775.2
	Nov 22, 20-Dec 05, 20	7,289	763.5	742.9	784.7
	Dec 06, 20-Dec 19, 20	6,855	727.5	707.3	748.3
	Dec 20, 20-Jan 02, 21	5,272	564.5	546.5	582.9
	Jan 03, 21-Jan 16, 21	6,015	622.2	603.7	641.3
	Jan 17, 21-Jan 30, 21	3,511	378.9	363.9	394.4
	Jan 31, 21-Feb 13, 21	2,315	241.3	229.8	253.4
	Feb 14, 21-Feb 27, 21	1,673	170.7	161.2	180.8
	Feb 28, 21-Mar 13, 21	1,436	142.1	133.7	151.0
	Mar 14, 21-Mar 27, 21	1,761	168.3	159.4	177.8
	Mar 28, 21-Apr 10, 21	2,283	213.4	203.5	223.9
	Apr 11, 21-Apr 24, 21	2,862	266.1	255.0	277.6
	Apr 25, 21-May 08, 21	2,765	255.3	244.4	266.6

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
	May 09, 21-May 22, 21	2,003	181.4	172.4	190.8
	May 23, 21-June 05, 21	1,270	117.8	110.4	125.7
	June 06, 21-June 19, 21	936	92.2	85.4	99.5
	June 20, 21-July 03, 21	745	73.7	67.5	80.4
	July 04, 21-July 17, 21	1,166	120.1	111.9	128.8
	July 18, 21-July 31, 21	2,655	253.6	242.5	265.2
	Aug 01, 21-Aug 14, 21	5,225	495.8	480.2	512.0
	Aug 15, 21-Aug 28, 21	6,105	593.3	575.8	611.3
	Aug 29, 21-Sept 11, 21	6,002	573.4	556.3	591.1
	Sept 12, 21-Sept 25, 21	5,470	510.3	494.3	526.8
	Sept 26, 21-Oct 09, 21	4,409	417.1	402.5	432.3
	Oct 10, 21-Oct 23, 21	3,574	346.6	333.2	360.6
	Oct 24, 21-Nov 06, 21	2,915	274.1	262.4	286.4
	Nov 07, 21-Nov 20, 21	2,390	228.1	217.3	239.5
	Nov 21, 21-Dec 04, 21	2,160	203.1	193.1	213.7
	Dec 05, 21-Dec 18, 21	2,403	218.8	208.6	229.5

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
White	Dec 19, 21-Jan 01, 22	7,153	680.7	662.5	699.4
	Jan 02, 22-Jan 15, 22	26,633	2,390.7	2,357.3	2,424.5
	Jan 16, 22-Jan 29, 22	21,199	1,918.7	1,888.2	1,949.7
	Jan 30, 22-Feb 12, 22	7,283	684.0	665.0	703.5
	Feb 13, 22-Feb 26, 22	1,894	190.9	180.4	201.9
	Feb 27, 22-Mar 12, 22	749	81.5	74.4	89.4
	Mar 01, 20-Mar 14, 20	642	11.0	10.1	11.9
	Mar 15, 20-Mar 28, 20	2,392	42.4	40.7	44.1
	Mar 29, 20-Apr 11, 20	1,806	32.1	30.6	33.6
	Apr 12, 20-Apr 25, 20	1,043	18.3	17.2	19.5
	Apr 26, 20-May 09, 20	883	15.6	14.6	16.7
	May 10, 20-May 23, 20	603	10.9	10.0	11.8
	May 24, 20-Jun 06, 20	774	14.7	13.7	15.8
	Jun 07, 20-Jun 20, 20	1,343	25.9	24.5	27.3
	Jun 21, 20-Jul 04, 20	2,921	59.2	57.0	61.4
	Jul 05, 20-Jul 18, 20	3,518	69.8	67.5	72.2

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
	Jul 19, 20-Aug 01, 20	3,514	68.5	66.2	70.8
	Aug 02, 20-Aug 15, 20	2,785	54.7	52.7	56.8
	Aug 16, 20-Aug 29, 20	2,221	44.1	42.3	46.0
	Aug 30, 20-Sept 12, 20	2,237	44.5	42.7	46.4
	Sept 13, 20-Sept 26, 20	2,793	54.9	52.9	57.0
	Sept 27, 20-Oct 10, 20	3,921	77.8	75.3	80.3
	Oct 11, 20-Oct 24, 20	4,898	96.1	93.4	98.8
	Oct 25, 20-Nov 07, 20	8,063	158.9	155.5	162.5
	Nov 08, 20-Nov 21, 20	14,889	293.7	289.0	298.6
	Nov 22, 20-Dec 05, 20	15,158	296.9	292.1	301.7
	Dec 06, 20-Dec 19, 20	14,559	284.1	279.5	288.8
	Dec 20, 20-Jan 02, 21	13,280	259.5	255.1	264.0
	Jan 03, 21-Jan 16, 21	14,577	288.5	283.8	293.2
	Jan 17, 21-Jan 30, 21	9,197	182.1	178.3	185.9
	Jan 31, 21-Feb 13, 21	6,762	134.3	131.1	137.6
	Feb 14, 21-Feb 27, 21	5,204	104.1	101.3	107.0

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
	Feb 28, 21-Mar 13, 21	4,826	97.5	94.8	100.3
	Mar 14, 21-Mar 27, 21	6,347	129.3	126.2	132.6
	Mar 28, 21-Apr 10, 21	8,036	164.9	161.3	168.6
	Apr 11, 21-Apr 24, 21	9,962	204.4	200.4	208.5
	Apr 25, 21-May 08, 21	9,032	186.1	182.3	190.0
	May 09, 21-May 22, 21	6,510	133.3	130.0	136.6
	May 23, 21-June 05, 21	4,462	91.2	88.6	94.0
	June 06, 21-June 19, 21	3,096	62.3	60.1	64.5
	June 20, 21-July 03, 21	2,724	54.5	52.5	56.6
	July 04, 21-July 17, 21	4,448	90.2	87.6	93.0
	July 18, 21-July 31, 21	10,009	202.0	198.0	206.0
	Aug 01, 21-Aug 14, 21	19,266	389.8	384.3	395.4
	Aug 15, 21-Aug 28, 21	23,483	471.6	465.5	477.8
	Aug 29, 21-Sept 11, 21	23,935	482.9	476.7	489.1
	Sept 12, 21-Sept 25, 21	21,560	440.0	434.1	446.0
	Sept 26, 21-Oct 09, 21	17,801	363.0	357.6	368.4

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
Asian	Oct 10, 21-Oct 23, 21	16,601	334.7	329.6	339.9
	Oct 24, 21-Nov 06, 21	14,751	297.3	292.5	302.2
	Nov 07, 21-Nov 20, 21	12,088	246.1	241.7	250.6
	Nov 21, 21-Dec 04, 21	10,869	221.6	217.5	225.9
	Dec 05, 21-Dec 18, 21	11,837	245.1	240.6	249.6
	Dec 19, 21-Jan 01, 22	36,270	745.4	737.7	753.2
	Jan 02, 22-Jan 15, 22	96,607	2,006.3	1,993.5	2,019.1
	Jan 16, 22-Jan 29, 22	71,941	1,491.1	1,480.2	1,502.2
	Jan 30, 22-Feb 12, 22	29,881	609.5	602.5	616.5
	Feb 13, 22-Feb 26, 22	9,498	189.2	185.4	193.1
	Feb 27, 22-Mar 12, 22	4,117	80.9	78.4	83.4
	Mar 01, 20-Mar 14, 20	121	18.8	15.6	22.6
	Mar 15, 20-Mar 28, 20	306	43.9	39.1	49.3
	Mar 29, 20-Apr 11, 20	376	54.5	49.1	60.4
	Apr 12, 20-Apr 25, 20	269	39.5	34.9	44.7
	Apr 26, 20-May 09, 20	154	21.9	18.6	25.8

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
	May 10, 20-May 23, 20	122	17.4	14.4	20.9
	May 24, 20-Jun 06, 20	85	11.7	9.4	14.5
	Jun 07, 20-Jun 20, 20	116	16.1	13.4	19.5
	Jun 21, 20-Jul 04, 20	294	39.8	35.4	44.7
	Jul 05, 20-Jul 18, 20	327	44.3	39.6	49.5
	Jul 19, 20-Aug 01, 20	326	45.2	40.4	50.5
	Aug 02, 20-Aug 15, 20	279	37.8	33.6	42.7
	Aug 16, 20-Aug 29, 20	264	35.6	31.5	40.3
	Aug 30, 20-Sept 12, 20	214	29.5	25.7	33.9
	Sept 13, 20-Sept 26, 20	253	35.0	30.8	39.7
	Sept 27, 20-Oct 10, 20	354	46.8	42.1	52.0
	Oct 11, 20-Oct 24, 20	380	49.9	45.1	55.3
	Oct 25, 20-Nov 07, 20	815	109.7	102.3	117.7
	Nov 08, 20-Nov 21, 20	1,717	230.4	219.5	241.8
	Nov 22, 20-Dec 05, 20	1,985	271.7	259.7	284.2
	Dec 06, 20-Dec 19, 20	1,867	260.9	249.1	273.4

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
	Dec 20, 20-Jan 02, 21	1,691	231.8	220.7	243.4
	Jan 03, 21-Jan 16, 21	1,808	250.3	238.8	262.4
	Jan 17, 21-Jan 30, 21	1,161	162.3	153.0	172.2
	Jan 31, 21-Feb 13, 21	757	105.0	97.6	112.9
	Feb 14, 21-Feb 27, 21	604	82.8	76.3	89.8
	Feb 28, 21-Mar 13, 21	534	71.0	65.2	77.5
	Mar 14, 21-Mar 27, 21	794	106.3	99.0	114.1
	Mar 28, 21-Apr 10, 21	939	121.8	114.1	130.0
	Apr 11, 21-Apr 24, 21	1,090	142.2	133.8	151.0
	Apr 25, 21-May 08, 21	788	101.9	94.9	109.4
	May 09, 21-May 22, 21	362	47.3	42.6	52.6
	May 23, 21-June 05, 21	231	31.2	27.4	35.7
	June 06, 21-June 19, 21	170	23.3	20.0	27.1
	June 20, 21-July 03, 21	147	19.1	16.2	22.5
	July 04, 21-July 17, 21	277	36.0	31.9	40.6
	July 18, 21-July 31, 21	759	100.3	93.2	107.8

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
	Aug 01, 21-Aug 14, 21	1,279	168.1	159.0	177.8
	Aug 15, 21-Aug 28, 21	1,435	191.9	182.0	202.3
	Aug 29, 21-Sept 11, 21	1,400	186.3	176.6	196.6
	Sept 12, 21-Sept 25, 21	1,200	161.2	152.1	170.8
	Sept 26, 21-Oct 09, 21	1,118	152.0	143.1	161.3
	Oct 10, 21-Oct 23, 21	1,120	153.0	144.1	162.4
	Oct 24, 21-Nov 06, 21	1,006	136.7	128.4	145.6
	Nov 07, 21-Nov 20, 21	812	110.9	103.3	118.9
	Nov 21, 21-Dec 04, 21	712	95.9	89.0	103.4
	Dec 05, 21-Dec 18, 21	1,279	169.5	160.3	179.3
	Dec 19, 21-Jan 01, 22	6,897	894.1	872.9	915.9
	Jan 02, 22-Jan 15, 22	20,567	2,728.7	2,691.0	2,766.9
	Jan 16, 22-Jan 29, 22	10,803	1,456.5	1,428.8	1,484.8
	Jan 30, 22-Feb 12, 22	4,035	546.6	529.6	564.0
	Feb 13, 22-Feb 26, 22	1,437	193.1	183.2	203.6
	Feb 27, 22-Mar 12, 22	642	86.7	80.1	93.8

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
Black	Mar 01, 20-Mar 14, 20	36	13.6	9.6	19.3
	Mar 15, 20-Mar 28, 20	213	76.8	66.6	88.5
	Mar 29, 20-Apr 11, 20	319	116.3	103.5	130.6
	Apr 12, 20-Apr 25, 20	311	106.2	94.6	119.2
	Apr 26, 20-May 09, 20	213	71.6	62.2	82.3
	May 10, 20-May 23, 20	160	51.6	43.9	60.6
	May 24, 20-Jun 06, 20	133	45.2	37.7	54.1
	Jun 07, 20-Jun 20, 20	195	62.2	53.8	72.1
	Jun 21, 20-Jul 04, 20	387	121.4	109.4	134.7
	Jul 05, 20-Jul 18, 20	512	159.4	145.8	174.2
	Jul 19, 20-Aug 01, 20	566	183.1	168.1	199.5
	Aug 02, 20-Aug 15, 20	522	172.3	157.5	188.4
	Aug 16, 20-Aug 29, 20	324	104.6	93.4	117.1
	Aug 30, 20-Sept 12, 20	246	80.1	70.3	91.3
	Sept 13, 20-Sept 26, 20	277	89.8	79.3	101.6
	Sept 27, 20-Oct 10, 20	365	113.7	102.3	126.4

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
	Oct 11, 20-Oct 24, 20	425	135.4	122.6	149.4
	Oct 25, 20-Nov 07, 20	941	289.9	271.5	309.4
	Nov 08, 20-Nov 21, 20	1,512	479.7	455.3	505.4
	Nov 22, 20-Dec 05, 20	1,631	532.0	505.7	559.6
	Dec 06, 20-Dec 19, 20	1,553	517.1	490.8	544.7
	Dec 20, 20-Jan 02, 21	1,276	420.4	397.0	445.2
	Jan 03, 21-Jan 16, 21	1,277	410.0	387.2	434.0
	Jan 17, 21-Jan 30, 21	822	268.3	249.8	288.1
	Jan 31, 21-Feb 13, 21	491	160.9	146.6	176.5
	Feb 14, 21-Feb 27, 21	434	141.7	128.4	156.3
	Feb 28, 21-Mar 13, 21	433	136.6	124.0	150.4
	Mar 14, 21-Mar 27, 21	590	185.0	170.2	201.0
	Mar 28, 21-Apr 10, 21	843	255.1	238.1	273.2
	Apr 11, 21-Apr 24, 21	1,133	345.3	325.3	366.5
	Apr 25, 21-May 08, 21	1,071	330.1	310.4	351.1
	May 09, 21-May 22, 21	670	206.1	190.8	222.7

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
	May 23, 21-June 05, 21	506	155.5	142.2	170.1
	June 06, 21-June 19, 21	401	125.5	113.4	138.9
	June 20, 21-July 03, 21	305	94.1	83.8	105.6
	July 04, 21-July 17, 21	448	133.2	121.3	146.4
	July 18, 21-July 31, 21	921	278.9	261.0	297.9
	Aug 01, 21-Aug 14, 21	1,463	450.3	427.3	474.5
	Aug 15, 21-Aug 28, 21	1,615	506.7	481.9	532.8
	Aug 29, 21-Sept 11, 21	1,462	464.9	440.8	490.2
	Sept 12, 21-Sept 25, 21	1,249	389.9	368.3	412.8
	Sept 26, 21-Oct 09, 21	983	304.6	285.6	324.9
	Oct 10, 21-Oct 23, 21	888	280.6	262.3	300.3
	Oct 24, 21-Nov 06, 21	674	212.6	196.7	229.8
	Nov 07, 21-Nov 20, 21	494	156.9	143.2	172.0
	Nov 21, 21-Dec 04, 21	513	156.9	143.6	171.4
	Dec 05, 21-Dec 18, 21	1,083	330.5	311.0	351.2
	Dec 19, 21-Jan 01, 22	4,824	1,480.8	1,438.6	1,524.2

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
NHPI	Jan 02, 22-Jan 15, 22	10,558	3,288.0	3,224.1	3,353.1
	Jan 16, 22-Jan 29, 22	5,451	1,715.5	1,669.1	1,763.1
	Jan 30, 22-Feb 12, 22	1,876	605.3	577.4	634.5
	Feb 13, 22-Feb 26, 22	563	188.1	172.4	205.3
	Feb 27, 22-Mar 12, 22	228	76.9	67.1	88.2
	Mar 01, 20-Mar 14, 20	11	24.9	12.8	48.6
	Mar 15, 20-Mar 28, 20	35	89.0	59.3	133.7
	Mar 29, 20-Apr 11, 20	68	158.8	119.7	210.8
	Apr 12, 20-Apr 25, 20	102	192.4	155.9	237.3
	Apr 26, 20-May 09, 20	89	171.6	136.8	215.3
	May 10, 20-May 23, 20	119	216.2	177.6	263.1
	May 24, 20-Jun 06, 20	147	261.2	217.2	314.1
	Jun 07, 20-Jun 20, 20	208	366.6	316.4	424.7
	Jun 21, 20-Jul 04, 20	200	363.3	311.1	424.2
	Jul 05, 20-Jul 18, 20	155	270.5	228.2	320.6
	Jul 19, 20-Aug 01, 20	116	212.1	172.5	260.9

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
	Aug 02, 20-Aug 15, 20	114	222.2	179.9	274.5
	Aug 16, 20-Aug 29, 20	127	238.1	195.5	290.0
	Aug 30, 20-Sept 12, 20	117	218.3	177.1	269.0
	Sept 13, 20-Sept 26, 20	98	182.8	145.9	229.1
	Sept 27, 20-Oct 10, 20	115	225.9	181.8	280.7
	Oct 11, 20-Oct 24, 20	124	242.5	196.2	299.7
	Oct 25, 20-Nov 07, 20	253	461.4	402.3	529.1
	Nov 08, 20-Nov 21, 20	473	850.9	769.9	940.5
	Nov 22, 20-Dec 05, 20	440	822.6	736.9	918.2
	Dec 06, 20-Dec 19, 20	445	815.0	732.3	907.0
	Dec 20, 20-Jan 02, 21	460	870.7	783.9	967.2
	Jan 03, 21-Jan 16, 21	493	860.3	779.7	949.2
	Jan 17, 21-Jan 30, 21	421	778.2	697.2	868.6
	Jan 31, 21-Feb 13, 21	325	606.0	535.9	685.2
	Feb 14, 21-Feb 27, 21	226	387.6	336.7	446.2
	Feb 28, 21-Mar 13, 21	149	266.8	223.5	318.4

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
	Mar 14, 21-Mar 27, 21	214	365.6	316.6	422.2
	Mar 28, 21-Apr 10, 21	219	385.8	333.2	446.9
	Apr 11, 21-Apr 24, 21	343	581.5	517.9	652.8
	Apr 25, 21-May 08, 21	326	523.2	465.1	588.7
	May 09, 21-May 22, 21	241	419.7	363.4	484.8
	May 23, 21-June 05, 21	153	255.7	214.2	305.3
	June 06, 21-June 19, 21	126	202.0	167.8	243.2
	June 20, 21-July 03, 21	94	163.8	131.1	204.7
	July 04, 21-July 17, 21	176	295.1	250.5	347.7
	July 18, 21-July 31, 21	225	369.4	319.6	427.0
	Aug 01, 21-Aug 14, 21	488	824.2	745.3	911.6
	Aug 15, 21-Aug 28, 21	561	986.9	898.5	1,084.0
	Aug 29, 21-Sept 11, 21	590	1,001.4	915.3	1,095.6
	Sept 12, 21-Sept 25, 21	456	811.6	731.6	900.2
	Sept 26, 21-Oct 09, 21	360	637.5	567.7	715.9
	Oct 10, 21-Oct 23, 21	358	602.1	536.3	676.1

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
Multiracial	Oct 24, 21-Nov 06, 21	322	562.1	496.0	636.9
	Nov 07, 21-Nov 20, 21	242	407.2	355.7	466.2
	Nov 21, 21-Dec 04, 21	229	398.2	343.2	462.0
	Dec 05, 21-Dec 18, 21	349	587.0	522.3	659.7
	Dec 19, 21-Jan 01, 22	1,360	2,361.3	2,224.2	2,506.8
	Jan 02, 22-Jan 15, 22	3,210	5,533.5	5,323.1	5,752.1
	Jan 16, 22-Jan 29, 22	1,642	2,894.6	2,739.3	3,058.6
	Jan 30, 22-Feb 12, 22	532	955.8	865.8	1,055.3
	Feb 13, 22-Feb 26, 22	214	394.3	338.2	459.6
	Feb 27, 22-Mar 12, 22	71	123.4	96.3	158.2
	Mar 01, 20-Mar 14, 20	12	8.9	4.7	16.6
	Mar 15, 20-Mar 28, 20	66	32.7	24.9	43.0
	Mar 29, 20-Apr 11, 20	77	35.1	27.1	45.6
	Apr 12, 20-Apr 25, 20	53	27.4	20.1	37.4
	Apr 26, 20-May 09, 20	58	22.9	17.2	30.5
	May 10, 20-May 23, 20	48	20.4	14.9	28.0

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
	May 24, 20-Jun 06, 20	71	32.8	25.3	42.6
	Jun 07, 20-Jun 20, 20	109	36.6	29.3	45.7
	Jun 21, 20-Jul 04, 20	209	67.4	57.4	79.1
	Jul 05, 20-Jul 18, 20	228	87.5	75.2	101.8
	Jul 19, 20-Aug 01, 20	243	94.3	81.2	109.6
	Aug 02, 20-Aug 15, 20	160	55.5	46.0	66.9
	Aug 16, 20-Aug 29, 20	109	37.5	30.2	46.6
	Aug 30, 20-Sept 12, 20	105	37.0	29.2	46.8
	Sept 13, 20-Sept 26, 20	93	35.9	28.3	45.6
	Sept 27, 20-Oct 10, 20	136	51.4	41.9	63.2
	Oct 11, 20-Oct 24, 20	181	65.2	54.8	77.6
	Oct 25, 20-Nov 07, 20	416	146.3	130.5	164.0
	Nov 08, 20-Nov 21, 20	534	187.4	169.6	207.1
	Nov 22, 20-Dec 05, 20	551	199.7	181.4	219.9
	Dec 06, 20-Dec 19, 20	547	195.5	177.4	215.4
	Dec 20, 20-Jan 02, 21	430	155.0	138.9	172.9

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
	Jan 03, 21-Jan 16, 21	546	192.3	174.2	212.4
	Jan 17, 21-Jan 30, 21	331	115.2	101.1	131.3
	Jan 31, 21-Feb 13, 21	244	81.5	70.0	94.9
	Feb 14, 21-Feb 27, 21	162	56.2	46.6	67.7
	Feb 28, 21-Mar 13, 21	158	56.1	46.6	67.5
	Mar 14, 21-Mar 27, 21	270	94.4	81.9	108.8
	Mar 28, 21-Apr 10, 21	368	112.4	99.9	126.4
	Apr 11, 21-Apr 24, 21	486	153.3	138.3	170.0
	Apr 25, 21-May 08, 21	398	112.0	99.8	125.6
	May 09, 21-May 22, 21	266	73.6	63.9	84.8
	May 23, 21-June 05, 21	173	49.3	41.4	58.9
	June 06, 21-June 19, 21	102	30.6	24.4	38.4
	June 20, 21-July 03, 21	101	31.2	24.4	39.9
	July 04, 21-July 17, 21	170	51.2	42.9	61.2
	July 18, 21-July 31, 21	362	118.1	104.8	133.2
	Aug 01, 21-Aug 14, 21	620	193.5	176.2	212.6

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
	Aug 15, 21-Aug 28, 21	611	189.4	172.0	208.6
	Aug 29, 21-Sept 11, 21	640	205.1	186.5	225.6
	Sept 12, 21-Sept 25, 21	643	196.6	178.8	216.1
	Sept 26, 21-Oct 09, 21	572	173.7	156.9	192.1
	Oct 10, 21-Oct 23, 21	572	166.4	150.8	183.6
	Oct 24, 21-Nov 06, 21	445	137.6	122.5	154.6
	Nov 07, 21-Nov 20, 21	447	138.0	123.3	154.3
	Nov 21, 21-Dec 04, 21	382	121.4	107.6	137.0
	Dec 05, 21-Dec 18, 21	562	157.8	142.8	174.3
	Dec 19, 21-Jan 01, 22	633	198.5	181.2	217.6
	Jan 02, 22-Jan 15, 22	1,271	353.1	329.9	378.0
	Jan 16, 22-Jan 29, 22	772	215.7	197.5	235.6
	Jan 30, 22-Feb 12, 22	406	140.3	123.7	159.2
	Feb 13, 22-Feb 26, 22	119	44.8	35.7	56.1
	Feb 27, 22-Mar 12, 22	59	26.8	19.3	37.2
AIAN	Mar 01, 20-Mar 14, 20	7	9.0	4.1	20.0

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
	Mar 15, 20-Mar 28, 20	34	38.0	26.9	53.6
	Mar 29, 20-Apr 11, 20	55	62.0	47.4	81.2
	Apr 12, 20-Apr 25, 20	44	46.0	34.2	61.9
	Apr 26, 20-May 09, 20	78	80.4	64.4	100.5
	May 10, 20-May 23, 20	62	65.6	50.9	84.6
	May 24, 20-Jun 06, 20	99	106.4	87.0	130.2
	Jun 07, 20-Jun 20, 20	113	117.1	97.3	141.0
	Jun 21, 20-Jul 04, 20	113	120.8	100.0	145.8
	Jul 05, 20-Jul 18, 20	107	114.9	94.5	139.7
	Jul 19, 20-Aug 01, 20	162	170.5	145.6	199.5
	Aug 02, 20-Aug 15, 20	126	138.8	115.7	166.5
	Aug 16, 20-Aug 29, 20	80	83.4	66.7	104.2
	Aug 30, 20-Sept 12, 20	60	65.0	50.1	84.5
	Sept 13, 20-Sept 26, 20	66	67.4	52.9	85.9
	Sept 27, 20-Oct 10, 20	73	75.7	60.1	95.4
	Oct 11, 20-Oct 24, 20	63	67.1	52.0	86.6

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
	Oct 25, 20-Nov 07, 20	135	142.3	119.8	168.9
	Nov 08, 20-Nov 21, 20	311	333.5	297.6	373.7
	Nov 22, 20-Dec 05, 20	461	484.0	441.1	531.1
	Dec 06, 20-Dec 19, 20	469	497.0	453.2	544.9
	Dec 20, 20-Jan 02, 21	368	390.7	352.1	433.6
	Jan 03, 21-Jan 16, 21	398	410.1	371.4	452.8
	Jan 17, 21-Jan 30, 21	292	303.9	270.4	341.6
	Jan 31, 21-Feb 13, 21	250	258.9	228.3	293.5
	Feb 14, 21-Feb 27, 21	167	170.7	146.5	199.0
	Feb 28, 21-Mar 13, 21	169	170.1	146.2	197.9
	Mar 14, 21-Mar 27, 21	170	171.2	147.2	199.1
	Mar 28, 21-Apr 10, 21	201	207.1	179.9	238.4
	Apr 11, 21-Apr 24, 21	258	262.1	231.6	296.5
	Apr 25, 21-May 08, 21	212	217.7	189.9	249.5
	May 09, 21-May 22, 21	193	195.9	169.9	225.9
	May 23, 21-June 05, 21	107	107.0	88.5	129.4

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
	June 06, 21-June 19, 21	85	88.1	71.0	109.4
	June 20, 21-July 03, 21	55	58.8	44.7	77.3
	July 04, 21-July 17, 21	76	77.6	61.7	97.5
	July 18, 21-July 31, 21	242	249.7	219.8	283.7
	Aug 01, 21-Aug 14, 21	453	468.3	426.5	514.1
	Aug 15, 21-Aug 28, 21	610	633.8	584.8	686.9
	Aug 29, 21-Sept 11, 21	631	657.2	607.1	711.5
	Sept 12, 21-Sept 25, 21	554	572.8	526.2	623.5
	Sept 26, 21-Oct 09, 21	495	510.5	466.8	558.4
	Oct 10, 21-Oct 23, 21	433	448.2	407.3	493.1
	Oct 24, 21-Nov 06, 21	343	351.9	316.2	391.7
	Nov 07, 21-Nov 20, 21	244	249.6	219.6	283.7
	Nov 21, 21-Dec 04, 21	223	230.5	201.8	263.3
	Dec 05, 21-Dec 18, 21	228	236.1	206.9	269.4
	Dec 19, 21-Jan 01, 22	691	713.1	661.1	769.2
	Jan 02, 22-Jan 15, 22	2,221	2,289.9	2,195.1	2,388.7

Race/Ethnicity	Two-Week Period	Case Count	Age-Adjusted Case Rate per 100,000	Lower 95% Confidence Interval	Upper 95% Confidence Interval
	Jan 16, 22-Jan 29, 22	1,611	1,652.3	1,572.6	1,736.0
	Jan 30, 22-Feb 12, 22	713	752.0	697.4	810.8
	Feb 13, 22-Feb 26, 22	243	261.6	229.7	298.0
	Feb 27, 22-Mar 12, 22	91	98.9	79.8	122.4

Source: Washington Disease Reporting System (WDRS)

Cumulative crude confirmed or probable case counts and percentages by language spoken

Analysis of language spoken provides another important method to understand health disparities and communities impacted by COVID-19. Use of one method alone may mask health disparities and community-specific impacts. Almost half of reported confirmed or probable cases are missing information on primary language. Despite missing data, there are some important observations.

The following table presents counts and percentages of confirmed or probable cases, by primary language spoken. The percentage of the Washington state population 5 years and over with limited English proficiency that speak each language are also included to provide context. The information on the percentage of the Washington state population with limited English proficiency come from the Office of Financial Management 2016 estimates. Findings should be interpreted with caution due to the high proportion of missing data (75%).

Table 4. Confirmed or probable COVID-19 case count and percentage of cases by primary language spoken

Language	Case Count	% of Cases	% of WA Population with Limited English Proficiency*
All Cases	1,447,719	100.0%	
Unknown Language	1,086,132	75.0%	
Known Language	361,587	25.0%	

Language	Case Count	% of Cases	% of WA Population with Limited English Proficiency*
English	313,375	86.7*%	
Spanish	40,832	11.3*%	6.4
Marshallese	352	0.1*%	0.1
Vietnamese	1,288	0.4*%	0.5
Russian	1,743	0.5*%	0.3
Chinese (all)	457	0.1*%	0.3
Ukrainian	304	0.1*%	0.2
Somali	362	0.1*%	0.1
Tagalog	181	0.1*%	0.1
Amharic	203	0.1*%	0.1
Other	2,490	0.7*%	

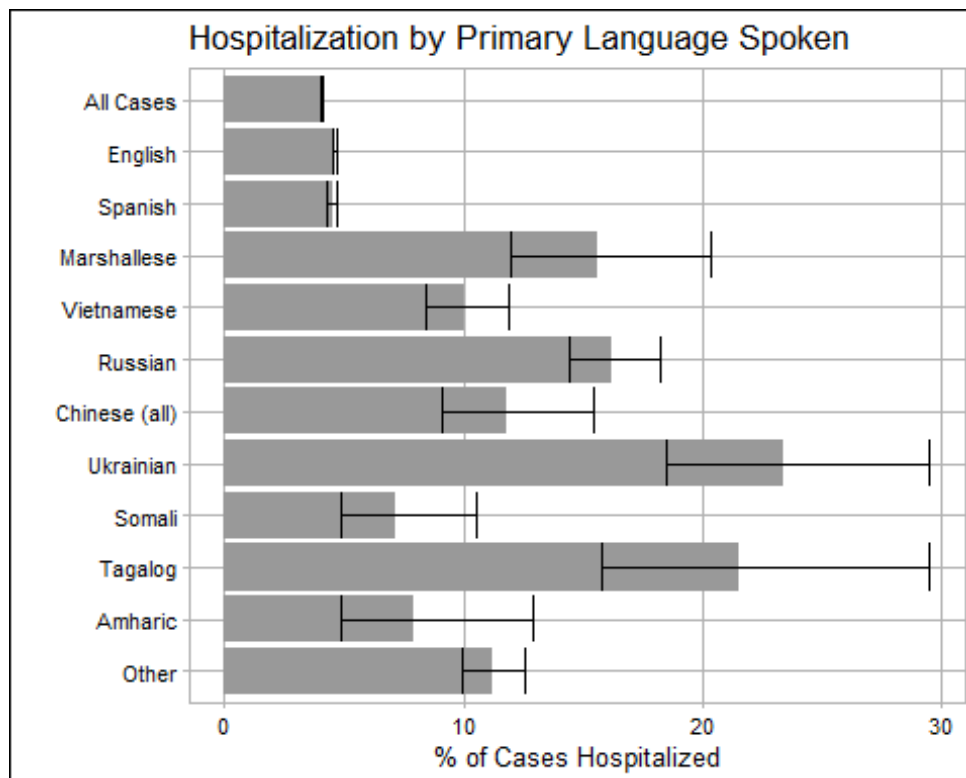
*For more information on the selected WA populations by primary language reported here, please see the WA OFM methodology, https://ofm.wa.gov/sites/default/files/public/legacy/pop/subject/ofm_pop_limited_english_proficiency_methodology.pdf

Cumulative hospitalization percentages among confirmed or probable COVID-19 cases by language spoken

The following table and graph present the percentages of confirmed or probable cases who were hospitalized, by primary language spoken. The high rates of hospitalizations among confirmed or probable cases whose primary language was other than English or Spanish suggests that increased exposures and/or barriers to care may contribute to more severe disease in these populations. Languages with less than 10 individuals hospitalized were removed from this analysis to protect patient confidentiality. Findings should be interpreted with caution due to the high proportion of missing data (75%).

Table 5: Percentages of confirmed or probable COVID-19 cases hospitalized by primary language spoken

Language	Case Count	Hospitalization Count	% language specific cases hospitalized
All Cases	1,447,719	58,901	4.1%
English	313,375	14,418	4.6%
Spanish	40,832	1,841	4.5%
Marshallese	352	55	15.6%
Vietnamese	1,288	129	10%
Russian	1,743	282	16.2%
Chinese (all)	457	54	11.8%
Ukrainian	304	71	23.4%
Somali	362	26	7.2%
Tagalog	181	39	21.5%
Amharic	203	16	7.9%
Other	2,490	278	11.2%



Washington State Department of
Health